

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference TIE-001-PCT	FOR FURTHER ACTION see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No. PCT/EP 03/09393	International filing date (day/month/year) 25/08/2003	(Earliest) Priority Date (day/month/year)
Applicant RAMAEL, Marc		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 6 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing :

☐ contained in the international application in written form.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☐ furnished subsequently to this Authority in computer readable form.

☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☐ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. ☒ **Certain claims were found unsearchable** (See Box I).

3. ☐ **Unity of invention is lacking** (see Box II).

4. With regard to the **title**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the **drawings** to be published with the abstract is Figure No.

☐ as suggested by the applicant.

☐ because the applicant failed to suggest a figure.

☐ because this figure better characterizes the invention.

☐ None of the figures.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/EP 03/09393

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☒ Claims Nos.: 11, 26 (all partially)
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
see FURTHER INFORMATION sheet PCT/ISA/210
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP 03/09393

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 2002031781	A1	14-03-2002	US 2002119582 A1	29-08-2002
			US 2001024795 A1	27-09-2001
			EP 0981748 A1	01-03-2000
			WO 9838513 A1	03-09-1998
US 5223242	A	29-06-1993	EP 0268707 A2	01-06-1988
			JP 62181229 A	08-08-1987
US 5583001	A	10-12-1996	US 5196306 A	23-03-1993
			US 5731158 A	24-03-1998
			AT 103071 T	15-04-1994
			AU 645491 B2	20-01-1994
			AU 5410190 A	22-10-1990
			CA 2013214 A1	29-09-1990
			CA 2301818 A1	29-09-1990
			DE 69007473 D1	21-04-1994
			DE 69007473 T2	21-07-1994
			EP 0465577 A1	15-01-1992
			ES 2063347 T3	01-01-1995
			JP 2948904 B2	13-09-1999
			JP 4504206 T	30-07-1992
			RU 2102759 C1	20-01-1998
			WO 9011523 A2	04-10-1990
			US 5182203 A	26-01-1993

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box I.2

Claims Nos.: 11, 26 (all partially)

The expressions "for use in a method of claims 1 to 7" and "for use in a method of claims 21 to 23", used in present claims 11 and 26, respectively, do not in any way characterise the components which are to be part of the kit.

Thus, the search had to be restricted to the components identified in the application, namely to polymers comprising multiple antibodies directed against immunoglobulins of one species and comprising also multiple antibodies directed against immunoglobulins of another species.

The applicant's attention is drawn to the fact that claims, or parts of claims, relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure.

INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP 03/09393

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 G01N33/543 G01N33/532 G01N33/58

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 G01N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ, BIOSIS, WPI Data, EMBASE

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	TORCHILIN V P ET AL: "ANTIBODY-LINKED CHELATING POLYMERS FOR IMMUNOIMAGING IN VIVO" JOURNAL OF CONTROLLED RELEASE, ELSEVIER SCIENCE PUBLISHERS B.V. AMSTERDAM, NL, vol. 11, 1989, pages 297-303, XP002072580 ISSN: 0168-3659 abstract page 302, left-hand column, paragraph 2 -page 303, line 2	1-29
X	US 2002/031781 A1 (KHAW BAN-AN ET AL) 14 March 2002 (2002-03-14) cited in the application abstract; figures 1A,1B --- -/--	1-20

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *Z* document member of the same patent family

Date of the actual completion of the international search

12 December 2003

Date of mailing of the international search report

13/01/2004

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Luis Alves, D

INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP 03/09393

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 223 242 A (KLIBANOV ALEXANDER L ET AL) 29 June 1993 (1993-06-29) abstract; claims ---	21-29
X	OKADOME AYA ET AL: "Reactivity of a dual amplified chlamydia immunoassay with different serovars of Chlamydia trachomatis" INTERNATIONAL JOURNAL OF STD AND AIDS, vol. 10, no. 7, July 1999 (1999-07), pages 460-463, XP009022391 ISSN: 0956-4624 abstract ---	1-29
X	WERTHER KIM ET AL: "Immunoglobulin and enzyme-conjugated dextran polymers enhance u-PAR staining intensity of carcinoma cells in peripheral blood smears" JOURNAL OF HISTOCHEMISTRY AND CYTOCHEMISTRY, vol. 47, no. 7, July 1999 (1999-07), pages 959-963, XP002264894 ISSN: 0022-1554 abstract ---	1-29
A	BOECHER MICHAEL ET AL: "Synthesis of mono- and bifunctional peptide-dextran conjugates for the immobilization of peptide antigens on ELISA plates: Properties and application" JOURNAL OF IMMUNOLOGICAL METHODS, vol. 208, no. 2, 27 October 1997 (1997-10-27), pages 191-202, XP002264895 ISSN: 0022-1759 abstract ---	1-20
A	US 5 583 001 A (BOBROW MARK N ET AL) 10 December 1996 (1996-12-10) the whole document -----	1-20